

## Coast Guard, DHS

## § 164.015-3

### § 164.013-5 Acceptance tests.

Manufacturers shall ensure that the performance and identification tests described in UL 1191, as appropriate, are performed on a minimum of five samples in each of the lightest and darkest colors submitted for acceptance by a recognized laboratory accepted under § 164.019.

### § 164.013-6 Production tests, inspections, and marking.

Manufacturers shall provide in-plant quality control of polyethylene foam in accordance with the requirements of § 164.019-13 and any requirements of the recognized laboratory. The manufacturer of the foam has primary responsibility for quality control over the production of the foam.

### § 164.013-7 Marking.

(a) *General.* The manufacturer must ensure that each shipping label, and each unit of put-up, is permanently and clearly marked in a color which contrasts with the color of the surface on which the marking is applied. Each label must be marked with—

(1) The manufacturer's or supplier's name, trade name, or symbol;

(2) The unique style, part, or model number of the material;

(3) The thickness of the material;

(4) The lot number of the material; and

(5) The product Use Code or Codes.

(b) Each unit of put-up must be marked with the appropriate recognized laboratory's certification marking(s).

## Subpart 164.015—Plastic Foam, Unicellular, Buoyant, Sheet and Molded Shape

SOURCE: CGFR 65-37, 30 FR 11593, Sept. 10, 1965, unless otherwise noted.

### § 164.015-1 Applicable specifications and standards.

(a) *Specifications.* The following specification and standard, of the issue in effect on the date the plastic foam material is manufactured, form a part of this subpart:

(1) Military specification:

MIL-F-859—Fuel Oil, Boiler.

(2) Federal specification:

C-C-91—Candle illuminating.

(3) Federal standard:

Standard 601—Rubber: Sampling and Testing.

(4) ASTM

D4986-98, Standard Test Method for Horizontal Burning Characteristics of Cellular Polymeric Materials.

(b) *Copies on file.* Copies of the specifications and standards referred to in this section shall be kept on file by the plastic foam manufacturer with this subpart.

(1) The Federal Specification and the Federal Standard may be purchased from the General Services Administration, Federal Acquisition Service, Office of the FAS Commissioner, 2200 Crystal Drive, 11th Floor, Arlington, VA 22202; telephone 703-605-5400.

(2) The Military Specification may be obtained from the Military Specifications and Standards, Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, <https://assist.daps.dla.mil/quicksearch/>.

(3) The A.S.T.M. Standard may be purchased from the American Society for Testing Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

[CGFR 65-37, 30 FR 11593, Sept. 10, 1965, as amended by CGFR 65-64, 31 FR 563 Jan. 18, 1966; USCG-1999-5151, 64 FR 67186, Dec. 1, 1999; USCG-2013-0671, 78 FR 60162, Sept. 30, 2013]

### § 164.015-2 Types.

(a) Unicellular expanded polyvinyl chloride-acetate copolymer or synthetic rubber modified polyvinyl chloride, polymer or copolymer plastic foam shall be of three types as follows:

Type A—for life preservers, buoyant vests or buoyant cushions.

Type B—for buoyant vests or buoyant cushions.

Type C—for ring life buoys.

(b) [Reserved]

### § 164.015-3 Material and workmanship.

(a) The unicellular plastic foam shall be all new material complying with the requirements of this specification. The results of the tests described in § 164.015-4 shall yield property values

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within the limits shown in Table 164.015-4(a).

(b) The unicellular plastic foam shall be produced in sheet stock or molded shapes.

## § 164.015-4 Inspections and tests.

(a) *General.* Unicellular plastic foam to be used in a finished product subject to inspection by the Coast Guard also shall be subject to inspection at the plant where the foam is manufactured. The manufacturer of the foam has primary responsibility for quality control over the production of the foam. A marine inspector shall be admitted to any

place in the factory where production or partial processing of the foam takes place, and he may take samples of the foam or other materials for further inspections or tests. The manufacturer shall provide a suitable place and the apparatus necessary for the performance of certain tests to be witnessed by the marine inspector, the results of which shall comply with Table 164.015-4(a). Unless otherwise specified, all tests shall be conducted at a temperature of 21° ±3 °C. (70° ±5 °F.) The properties listed in Table 164.015-4(a) shall be determined on specimens of sheet foam or molded shapes.

TABLE 164.015-4(a)

Properties	Test method	Units	Type A	Type B	Type C
Density (maximum)	164.015-4(b)	Pounds/feet <sup>3</sup>	5.0	5.0	8.5
Buoyancy in fresh water (minimum)	164.015-4(c)	Pounds/feet <sup>3</sup>	54.0	54.0	52.0
Volume loss on heat aging (maximum).	164.015-4(d)	Percent	5.0	5.0	4.0
Compression deflection at 25 percent.	164.015-4(e)	P.s.i.	3.0 max.	3.0 max.	7.0 min.
Compression set (maximum)	164.015-4(f)	Percent	24	24	20
Fire retardance (maximum)	164.015-4(g)(1)	Seconds	2	.....	30
		Inches	1	.....	3
	164.015-4(g)(2)	Inches per minute	.....	4	.....
Tensile strength (minimum)	164.015-4(h)	P.s.i.	30	20	60
Ultimate elongation (minimum)	164.015-4(h)	Percent	75	75	.....
Water absorption (maximum)	164.015-4(i)	Pounds/feet <sup>2</sup>	.06	.06	.06
Flexibility at 0 ±2F 164.015-4(j) No cracking No cracking					
Oil resistance	164.015-4(k)		(1)	(1)	(1)
Odor	164.015-4(l)		(2)	(2)	(2)

<sup>1</sup>No softening or swelling.

<sup>2</sup>Not objectionable.

(b) *Density.* The density of the material shall be determined by dividing the weight of the material by its volume and shall be expressed in pounds per cubic foot. The volume shall be determined by measuring the volume of water displaced by the material or by direct measurement of the specimen using vernier calipers reading to 0.001 inch A sheet specimen 4" × 4" × thickness furnished shall be used unless the

foam is molded shape, then the largest single piece so molded shall be used.

(c) *Buoyancy in fresh water*—(1) *Specimens.* The buoyancy test shall be made with a sample of the sheet material measuring 12" × 12" × thickness of material furnished or with the largest molded shape furnished.

(2) *Procedure.* Securely attach a spring scale in a position directly over a test tank. Suspend a weighted wire